

Work Order ID 53323-1

October 30, 2009 10:18:37 AM

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Item ID: D412-666-011

Accept

Revision ID: C1

Item Name: Gross Weight Towing

Start Date: 30/10/2009 Start Qty: 4.00

Required Date: 02/11/2009 Req'd Qty: 4.00

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan:

Date: 09-10-30 Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

IIN D412-666

Rev C1

100

0.00



DC

Document Control

DOCUMENT CONTROL

Memo

Photocopy bluefile &amp; type labels per PPP412-666-011

CHG 004

HJ for BG 09/11/13

110

0.00



Packaging

Packaging

Pick Kit

Memo

alula

sl

(1x)

120

0.00



QC

Quality Control

QC4- 100% Inspect kits for completeness

Memo

MD 09/11/13

X1

(Kit already done &amp; packaged)

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Item ID: D412-666-011

Revision ID: C1

Item Name: Gross Weight Towing

Start Date: 30/10/2009 Start Qty: 4.00

Required Date: 02/11/2009 Req'd Qty: 4.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130



Packaging

Packaging

0.00

Memo

0.00

Identify and pack for shipping as per PPP D412-666-011 Location: ☐ PPP Rev: ☒

140



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

9/11/13 [Signature]

1 [Signature] 10/31/13

11/01/13

# Picklist Print

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Work Order ID: 53323

Parent Item: D412-666-011RevC1

Parent Item Name: Gross Weight Towing

Comments:

Start Date: 30/10/2009

Required Date: 02/11/2009

Start Qty: 4.00

Required Qty: 4.00

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Remaining<br>Qty To Pick | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|

|  |  |           |    |  |  |  |      |         |         |  |  |  |
|--|--|-----------|----|--|--|--|------|---------|---------|--|--|--|
| AN6-15A  |  | Purchased | No |  |  |  | Each | 72.0000 | 16.0000 |  |  |  |
|  |  |           |    |  |  |  |      |         |         |  |  |  |
| Bolt   |  |           |    |  |  |  |      |         |         |  |  |  |

| Warehouse      | Location | Loc Qty | Loc Code |
|----------------|----------|---------|----------|
| Main Warehouse | ST       | 72      |          |
|                | 108744   | 12      |          |
|                | 111424   | 10      |          |
|                | 111425   | 50      |          |

9/11/2 sl 4x

|  |  |           |    |  |  |  |      |         |         |  |  |  |
|--|--|-----------|----|--|--|--|------|---------|---------|--|--|--|
| AN6-45A  |  | Purchased | No |  |  |  | Each | 16.0000 | 16.0000 |  |  |  |
|  |  |           |    |  |  |  |      |         |         |  |  |  |
| Bolt   |  |           |    |  |  |  |      |         |         |  |  |  |

| Warehouse      | Location | Loc Qty | Loc Code |
|----------------|----------|---------|----------|
| Main Warehouse | ST       | 16      |          |
|                | 110002   | 1       |          |
|                | 111425   | 15      |          |

5/10 sl

9/11/2 sl 4x

|  |  |           |    |  |  |  |      |          |         |  |  |  |
|--|--|-----------|----|--|--|--|------|----------|---------|--|--|--|
| AN960JD616   |  | Purchased | No |  |  |  | Each | 798.0000 | 32.0000 |  |  |  |
|  |  |           |    |  |  |  |      |          |         |  |  |  |
| Washer   |  |           |    |  |  |  |      |          |         |  |  |  |

| Warehouse      | Location | Loc Qty | Loc Code |
|----------------|----------|---------|----------|
| Main Warehouse | ST       | 798     |          |
|                | 112314   | 298     |          |
|                | 112828   | 500     |          |

15x sl

9/11/2 sl 8x

32x sl



# Picklist Print

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Work Order ID: 53323



Parent Item: D412-666-011RevC1



Parent Item Name: Gross Weight Towing

Start Date: 30/10/2009

Required Date: 02/11/2009

Comments:

Start Qty: 4.00

Required Qty: 4.00

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Remaining<br>Qty To Pick | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|

D2888RevA2

Manufactured No

Each 8.0000 8.0000



Lug

9/10/2 (4x) SD

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

8

47335

8

Each 623.0000 16.0000

4x 8x SD

MS21042L6

Purchased No



Nut

9/10/2 (4x) SD

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

623

105077

22

110002

5

111548

8

111578

400

112492

188

1x SD

(1x)

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Shop Packet Print

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# 1.0 APPLICABILITY:

GROSS WEIGHT TOWING KIT D412-666-011 MAY BE INSTALLED ON DART D205-634-XXX OR D204-635-XXX OR D412-742-XXX SKIDTUBES INSTALLED ON 412 AIRCRAFT TO ALLOW GROUND HANDLING AT GROSS WEIGHT IN ACCORDANCE WITH BELL SERVICE INSTRUCTION BHT-412-SI-58. IT IS ALSO ACCEPTABLE TO INSTALL THIS KIT ON 204/205/210/212 AIRCRAFT EQUIPPED WITH DART SKIDTUBES IN ORDER TO PRESERVE THE LIFE OF THE AFT CROSSTUBES. THIS KIT CONTAINS ENOUGH PARTS TO INSTALL D2888 LUGS ON BOTH SKIDTUBES.

# 2.0 PARTS LIST:

| QTY<br>-011 | PART         | DESCRIPTION             |
|-------------|--------------|-------------------------|
| X           | D412-666-011 | GROSS WEIGHT TOWING KIT |
| 2           | D2888        | LUG                     |
| 4           | AN6-15A      | BOLT                    |
| 4           | AN6-45A      | BOLT                    |
| 8           | AN960JD616   | WASHER                  |
| 4           | MS21042L6    | NUT (or MS21042-6)      |

# 3.0 WEIGHT AND BALANCE:

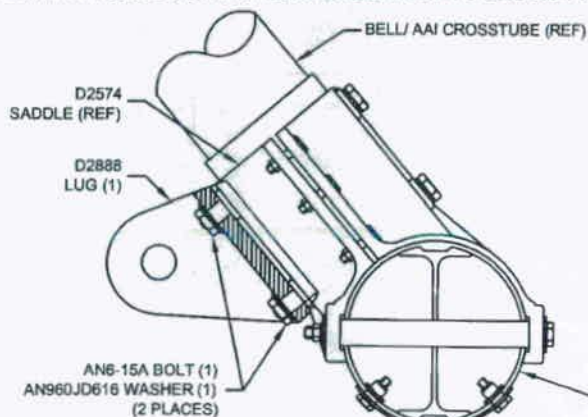
| INSTALLATION | WEIGHT             | LONGITUDINAL       |                        |
|--------------|--------------------|--------------------|------------------------|
|              |                    | ARM                | MOMENT                 |
| D412-666-011 | 1.90 lb<br>0.86 kg | 163.0 in<br>4.14 m | 310 in lb<br>3.56 m kg |

# 4.0 PROCEDURE:

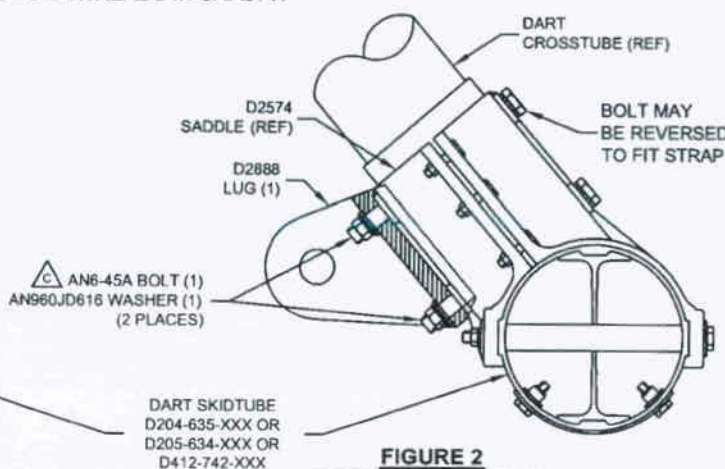
- 1) REMOVE AN6-12A BOLTS (4) ON INBOARD SIDE OF AFT SADDLE AND DISCARD. ON LANDING GEAR WITH DART AFT CROSSTUBES, REMOVE (4) AN6-40A BOLTS.
- 2) INSTALL D2888 LUGS WITH AN6-15A BOLTS (2) AS SHOWN IN FIGURE 1. USE AN6-45A (2) BOLTS ON DART CROSSTUBES, AS SHOWN IN FIGURE 2.
- 3) TORQUE BOLTS TO 95-110 in-lb (10.7-12.4 N-m).

# 5.0 NOTE:

IT IS ACCEPTABLE TO REPLACE THE AN6-15A/45A BOLTS WITH LONGER OR SHORTER AN6 BOLTS AS REQUIRED AND/OR INSTALL EXTRA AN960JD616 WASHERS UNDER NUT TO ENSURE 1.5 TO 4 THREADS IN SAFETY.



**FIGURE 1**  
(BELL/AAI CROSSTUBES)



**FIGURE 2**  
(DART CROSSTUBES)

| C          | - AN6-45A WAS AN6-43A, ADD NOTES<br>- TO ENSURE COMPATIBILITY WITH D412-742-011/-013<br>- ESTIMATE (PARTS/PICK LIST) IS AFFECTED | MB   | 07.08.09     |
|------------|--|--|--------------|
| B          | UPDATE KIT FOR BOTH SKIDTUBES AND COMPATIBILITY WITH DART CROSSTUBES   | CP   | 02.03.04     |
| A          | NEW ISSUE  | CP   | 99.05.03     |
| REV.       | DESCRIPTION  | BY   | DATE         |
| DESIGN     | <i>4</i>   | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |              |
| DRAWN      | <i>J</i>   |  |              |
| CHECKED    | <i>PH</i>  | DRAWING NO.  | REV. C       |
| MFG. APPR. | N/A  | D412-666   | SHEET 1 OF 1 |
| APPROVED   | <i>H</i>   | TITLE  | SCALE        |
| DE APPR.   | <i>H</i>   | 412 GROSS WEIGHT TOWING KIT  | 1:4          |
| DATE       | 07.08.10   | COPYRIGHT © 1999 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. |              |

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| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries